

INTRODUCTION

"Anyone can stand a day of being in labor; it's on the second and third and fourth days when you're 'plum wore out' and 'feel like you can't do nothing else' that you wish you could die and don't see how you can stand it." (1) So recounted a granny, midwife of Piedmont North Carolina circa 1939. As is apparent from the above quotation, the delivery of medical care during childbirth has changed dramatically in the recent past as home-based laywomen with often far more experience with, than technical understanding of, childbirth have been replaced by a multitude of highly trained hospital-based health care practitioners.

The purpose of this report is to examine important factors in the pregnancy and childbirth experience of North Carolina women and to compare North Carolina delivery data with national data from short-stay non-Federal hospitals. For this purpose the following sources, in addition to North Carolina Vital Registration data, are used: the 1980 U.S. Natality Followback Survey (NNS), the 1980 National Hospital Discharge Survey, and the 1980 North Carolina Hospital Discharge Survey.

Obstetrical medical care has a profound impact upon the health of women of childbearing age. The delivery of a baby is often the first hospitalization in a woman's life subsequent to her own birth. In a 1981 national household survey of hospital discharges, women of the primary childbearing years of 17-34 were three times as likely as men to require hospitalization in a short-stay hospital during the year. Much of this difference can be attributed to childbearing (2).

Obstetrical care also contributes significantly to infant health through numerous pathways. While the exact causal connections between prenatal care and birthweight have yet to be specified, "the weight of the evidence is that prenatal care reduces low birthweight among all women" (3).

Information gathered on the birth certificate indicates that the great majority of births in North Carolina are attended by a physician and delivered in a hospital, and this has been the predominant mode of obstetrical care for a number of years. There has been a slight decline in the percentage of white mothers who deliver in the hospital with a physician attending, from 99.9 percent in 1970 to 97.7 percent in 1984. Much of this change has occurred with the introduction of certified nurse midwives as

alternatives to traditional physician-oriented obstetrical care. By enactment of General Statute 130-50 on July 1, 1979, certified nurse midwives were permitted to attend births occurring in a hospital or other medical facility. Meanwhile, there has been a long-term increase in the percentage of nonwhite births attended by a physician in a hospital, from 95.1 percent in 1970 to 98.4 percent in 1984. This trend was interrupted only in the three years subsequent to the enactment of the legislation mentioned above. In 1984, there were thirty-six practicing nurse midwives in the state with an average caseload of approximately 40 births per year.

NATIONAL NATALITY SURVEY

Characteristics of North Carolina women having deliveries in 1980 were obtained from the National Natality Survey (NNS), a survey utilizing a followback protocol which traced informants identified on vital records to three respondents instrumental in their health care: the hospital where the delivery occurred, attendants at the delivery, and the medical providers of radiation services. Married women were also sent questionnaires requesting detailed information regarding income, smoking and drinking habits, mother's activities during pregnancy, and other information about maternal and paternal characteristics. In the case of unmarried women, only medical sources were contacted, with mothers omitted as informants. Sample size for the North Carolina contingent of the NNS was 230 live births. Through the use of composite synthetic estimation procedures that incorporate the data for the North Carolina respondents, maternal and health care characteristics were generated for North Carolina obstetrical patients in 1980 as a subset of the national data (4). In presenting statistics from the synthetic estimates generated from these data sets, comparisons will be made between the national and state information when substantial differences exist.

Based upon data gathered from the hospital record of each delivery of a live birth in the sample, 36 percent of deliveries in the state were preceded by some complication during pregnancy such as toxemia, anemia, etc. as compared with 29 percent of the deliveries to all U.S. women.¹ Deliveries to North Carolina women were slightly more likely to involve a complication during labor (34 percent) than were all U.S. deliveries (29 percent).² Twenty percent of N.C. women endured pregnancy with an underlying medical condition.³

¹ The NNS used a nonstandard definition of complications noted during pregnancy that included: rubella, obesity, inadequate weight gain, excessive weight gain, placenta previa, abnormal position of the cord, hypertension, toxemia, preeclampsia, eclampsia, embolism and other complications of pregnancy.

² The NNS used a nonstandard definition of complications noted during labor that included: inadequate pelvis, transverse lie, multiple birth, premature rupture of membranes, unusual bleeding or hemorrhage, prolonged labor, anesthesia reaction, abruptio placentae, placenta previa, abnormal position of the cord, hypertension, toxemia, preeclampsia, eclampsia, embolism, and a residual other category.

³ The NNS used a nonstandard definition of underlying medical condition that included: varicosity, congenital heart disease, thyroid condition, obesity, anemia, cardiovascular renal disease, asthma, other chronic pulmonary disease, orthopedic condition, RH incompatibility, gestational diabetes, juvenile diabetes, adult onset diabetes, sickle cell anemia, alcoholism, other drug abuse, and other underlying medical condition existing during pregnancy.